#### NATIONAL TRANSPORTATION SAFETY BOARD

Vehicle Recorder Division Washington, D.C. 20594

April 25, 2019

# **Call Detail Records**

# Specialist's Factual Report By Ben Hsu

### 1. EVENT

Location: Kingman, Arizona

Date: June 5, 2018
Vehicle: Locomotive
Operator: BNSF Railway
NTSB Number: RRD18FR009

### 2. EVENT SUMMARY

On June 5, 2018, about 2:50 p.m. mountain standard time, a westbound BNSF Railway (BNSF) intermodal train, S MEMSCO1 02 (intermodal train), operating in double-track centralized traffic control (CTC) territory collided with a rail unloading machine (RUM) vehicle at the rear of a ribbon rail work train, W NEESGM1 05 (work train). The accident occurred in Crozier Canyon, about 33 miles east of Kingman, Arizona. At the time of the accident, the sky was clear, the wind was from the southwest about 25 mph, and the temperature was 97°F. One Herzog Railroad Services, Inc. (Herzog) employee died and another was seriously injured. Damages were estimated to be over \$1 million.

### 3. DETAILS OF DEVICE INVESTIGATION

The NTSB's Vehicle Recorder Division received call detail records for mobile phone and landline accounts associated with the following phone numbers:

[Phone Number Redacted] BNSF Company Phone

[Phone Number Redacted] Train W NEESGM1-05 Conductor

[Phone Number Redacted] Train W NEESGM1-05 Brakeman Phone #1

[Phone Number Redacted] Train W NEESGM1-05 Brakeman Phone #2

[Phone Number Redacted] Train S MEMSCO01-01L Engineer

[Phone Number Redacted] Train S MEMSCO01-01L Conductor

[Phone Number Redacted] Train W NEESGM1-05 Engineer

The CDRs were obtained via subpoena issued by the NTSB Office of the General Counsel. At the direction of the NTSB Investigator-In-Charge (IIC), each set of records was examined for indications of usage between 8:00am and 5:00pm mountain standard time.

## 3.1. Call Detail Record Description

Call detail records (CDRs) are produced by a telecommunications service provider documenting the details of telephone calls, text messages, data usage, and other transactions. The exact information provided varies depending on the provider.

Data usage activity may be provided in the CDR, however, it is not possible to distinguish between user-initiated data activity and automatic background data activity by the device's operating system or installed applications. Therefore, data usage activity is not provided in this report.

While accounts are associated with individuals or businesses, these records do not document, nor is it able to ascertain from the records alone, precisely which individual was using the service at any given time.

# 3.2. BNSF Company Phone

Text message and data records were provided for this account. No voice usage records were provided.

Table 1 summarizes the text message activity during the pertinent time period. Time stamps are provided in mountain standard time.

Message SentMessage DeliveredMessage Direction6/5/2018 9:35:586/5/2018 9:36:00Incoming6/5/2018 9:48:596/5/2018 9:48:59Outgoing

**Table 1. Text Message Activity** 

#### 3.3. Train W NEESGM1-05 Conductor

Voice and text records were provided for this account in a combined report. No data records were provided. Table 2 summarizes this activity during the pertinent time period. For some entries, the provider is not able to determine the time zone of the transaction. For completeness, these entries are provided as they were provided in the CDR but the time zone has been indicated appropriately for each entry.

**Table 2. Voice and Text Message Activity** 

Start Time	End Time	Туре	Direction	Time Zone
06/05/2018 08:37:35	06/05/2018 08:37:53	Voice	Incoming	Unknown
06/05/2018 08:58:43	06/05/2018 08:58:54	Voice	Incoming	Unknown
06/05/2018 09:38:18	06/05/2018 09:38:59	Voice	Incoming	Unknown
06/05/2018 12:05:02	06/05/2018 12:05:16	Voice	Incoming	Unknown
06/05/2018 12:06:29	06/05/2018 12:06:31	WiFi Voice	Outgoing	Unknown
06/05/2018 12:09:53	06/05/2018 12:10:32	Voice	Outgoing	Pacific
06/05/2018 12:45:08	06/05/2018 12:45:39	Voice	Incoming	Unknown
06/05/2018 13:09:30	06/05/2018 13:09:44	Voice	Incoming	Unknown
06/05/2018 13:56:19	06/05/2018 13:59:22	WiFi Voice	Incoming	Unknown
06/05/2018 15:09:48	06/05/2018 15:09:48	Text	Incoming	UTC
06/05/2018 15:09:52	06/05/2018 15:09:52	Text	Incoming	UTC
06/05/2018 15:37:35	06/05/2018 15:37:53	WiFi Voice	Incoming	Unknown
06/05/2018 15:37:36	06/05/2018 15:37:53	WiFi Voice	Incoming	Unknown
06/05/2018 15:37:36	06/05/2018 15:37:53	WiFi Voice	Incoming	Unknown
06/05/2018 15:58:43	06/05/2018 15:58:54	WiFi Voice	Incoming	Unknown
06/05/2018 15:58:43	06/05/2018 15:58:54	WiFi Voice	Incoming	Unknown
06/05/2018 15:58:43	06/05/2018 15:58:54	WiFi Voice	Incoming	Unknown
06/05/2018 16:38:18	06/05/2018 16:39:00	WiFi Voice	Incoming	Unknown
06/05/2018 16:38:18	06/05/2018 16:39:00	WiFi Voice	Incoming	Unknown
06/05/2018 16:38:19	06/05/2018 16:39:00	WiFi Voice	Incoming	Unknown

### 3.4. Train W NEESGM1-05 Brakeman Phone #1

Voice, text, and data records were provided for this account. Five incoming voice calls were received on this account during the pertinent time period. All five calls were forwarded to voicemail.

Table 3 summarizes the text message activity during the pertinent time period. Time stamps are provided in mountain standard time.

**Table 3. Text Message Activity** 

6/5/2018 8:14 6/5/2018 9:35 Outgoing 6/5/2018 9:56 6/5/2018 9:56 Incoming 6/5/2018 9:57 6/5/2018 9:57 Outgoing 6/5/2018 9:57 6/5/2018 9:58 Incoming 6/5/2018 9:58 6/5/2018 9:58 Outgoing 6/5/2018 9:59 6/5/2018 9:59 Incoming 6/5/2018 9:59 6/5/2018 9:59 Incoming 6/5/2018 9:59 6/5/2018 9:59 Incoming 6/5/2018 10:02 6/5/2018 10:02 Incoming 6/5/2018 10:02 6/5/2018 10:02 Outgoing 6/5/2018 10:02 6/5/2018 10:02 Outgoing 6/5/2018 10:56 6/5/2018 10:56 Incoming 6/5/2018 11:21 6/5/2018 11:21 Incoming 6/5/2018 11:31 6/5/2018 11:31 Incoming 6/5/2018 11:33 6/5/2018 11:38 Outgoing 6/5/2018 11:40 6/5/2018 11:40 Incoming 6/5/2018 11:40 6/5/2018 11:40 Incoming 6/5/2018 11:42 6/5/2018 11:42 Incoming 6/5/2018 11:43 6/5/2018 11:42 Incoming 6/5/2018 11:44 6/5/2018 11:42 Incoming 6/5/2018 11:44 6/5/2018 11:44 Outgoing 6/5/2018 11:44 6/5/2018 11:42 Incoming 6/5/2018 11:43 6/5/2018 11:44 Incoming 6/5/2018 11:44 6/5/2018 11:42 Incoming 6/5/2018 11:44 6/5/2018 11:43 Incoming 6/5/2018 11:44 6/5/2018 11:43 Incoming 6/5/2018 11:44 6/5/2018 11:43 Incoming 6/5/2018 11:44 6/5/2018 11:44 Outgoing 6/5/2018 11:45 6/5/2018 11:49 Outgoing 6/5/2018 11:49 6/5/2018 11:49 Outgoing 6/5/2018 11:50 6/5/2018 11:50 Incoming 6/5/2018 11:50 6/5/2018 11:51 Incoming 6/5/2018 11:51 6/5/2018 11:51 Incoming 6/5/2018 11:53 6/5/2018 11:53 Incoming 6/5/2018 11:55 6/5/2018 11:55 Incoming	Message Sent	Message Delivered	Message Direction
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6/5/2018 11:54 6/5/2018 11:54 Outgoing 6/5/2018 11:55 6/5/2018 11:55 Incoming	6/5/2018 11:53	6/5/2018 11:53	Incoming
6/5/2018 11:55 6/5/2018 11:55 Incoming	6/5/2018 11:53	6/5/2018 11:53	Incoming
3	6/5/2018 11:54	6/5/2018 11:54	Outgoing
6/5/2018 11:55 6/5/2018 11:55 Incoming	6/5/2018 11:55	6/5/2018 11:55	Incoming
	6/5/2018 11:55	6/5/2018 11:55	Incoming

Message Sent	Message Delivered	Message Direction
6/5/2018 11:57	6/5/2018 11:57	Outgoing
6/5/2018 11:58	6/5/2018 11:58	Incoming
6/5/2018 11:59	6/5/2018 11:59	Outgoing
6/5/2018 12:17	6/5/2018 12:17	Incoming
6/5/2018 12:18	6/5/2018 12:18	Outgoing
6/5/2018 12:18	6/5/2018 12:18	Incoming
6/5/2018 12:19	6/5/2018 12:20	Outgoing
6/5/2018 12:21	6/5/2018 12:21	Incoming
6/5/2018 12:21	6/5/2018 12:21	Incoming
6/5/2018 12:22	6/5/2018 12:22	Outgoing
6/5/2018 12:33	6/5/2018 12:33	Incoming
6/5/2018 12:34	6/5/2018 12:34	Outgoing
6/5/2018 12:36	6/5/2018 12:36	Incoming
6/5/2018 12:37	6/5/2018 12:37	Outgoing
6/5/2018 12:37	6/5/2018 12:37	Incoming
6/5/2018 12:38	6/5/2018 12:38	Outgoing
6/5/2018 12:39	6/5/2018 12:39	Incoming
6/5/2018 12:39	6/5/2018 12:39	Incoming
6/5/2018 12:39	6/5/2018 12:39	Outgoing
6/5/2018 12:39	6/5/2018 12:39	Incoming
6/5/2018 12:40	6/5/2018 12:40	Outgoing
6/5/2018 12:40	6/5/2018 12:40	Incoming
6/5/2018 12:40	6/5/2018 12:40	Outgoing
6/5/2018 12:41	6/5/2018 12:41	Incoming
6/5/2018 12:41	6/5/2018 12:41	Outgoing
6/5/2018 12:41	6/5/2018 12:41	Incoming
6/5/2018 12:42	6/5/2018 12:42	Outgoing
6/5/2018 12:42	6/5/2018 12:42	Incoming
6/5/2018 12:43	6/5/2018 12:43	Outgoing
6/5/2018 12:43	6/5/2018 12:43	Incoming
6/5/2018 13:51	6/5/2018 13:51	Incoming
6/5/2018 13:51	6/5/2018 13:51	Outgoing

### 3.5. Train W NEESGM1-05 Brakeman Phone #2

Voice records were provided for this account. No text messaging or data records were provided. Five incoming voice calls were received on this account during the pertinent time period. All five calls were forwarded to voicemail.

# 3.6. Train S MEMSCO01-01L Engineer

Voice and data records were provided for this account. No text message records were provided. Three incoming voice calls and three outgoing voice calls were transacted on this account during the pertinent time period. The three incoming calls were forwarded to voicemail. Table 4 summarizes the three outgoing voice calls. Time stamps are provided in mountain standard time.

TimeDuration (mm:ss)06/05/2018 07:55:0029:0906/05/2018 08:25:2800:0306/05/2018 08:28:1730:25

**Table 4. Voice Call Activity** 

## 3.7. Train S MEMSCO01-01L Conductor

Voice, text, and data records were provided for this account. One outgoing call was transacted during the pertinent time period. This call began at 11:42:09 MST and was 03:07 (mm:ss) in duration.

Table 5 summarizes the text message activity during the pertinent time period. Time stamps are provided in mountain standard time.

Time	Direction
6/5/2018 10:41:18	Incoming
6/5/2018 10:41:18	Incoming
6/5/2018 10:41:46	Incoming
6/5/2018 10:43:11	Incoming
6/5/2018 10:44:36	Incoming
6/5/2018 10:45:34	Incoming

**Table 5. Text Message Activity** 

# 3.8. Train W NEESGM1-05 Engineer

Voice, text, and data records were provided for this account. Table 6 summarizes the voice call activity during the pertinent time period. Time stamps are provided in mountain standard time.

**Table 6. Voice Call Activity** 

Time	Duration (mm:ss)	Direction
6/5/2018 09:45:31	0:00	Incoming
6/5/2018 09:45:43	1:03	Outgoing
6/5/2018 09:45:43	1:03	Incoming
6/5/2018 14:25:29	0:00	Incoming
6/5/2018 14:25:36	0:11	Outgoing
6/5/2018 14:25:36	0:11	Incoming
6/5/2018 15:56:34	0:00	Incoming
6/5/2018 15:56:45	0:05	Incoming
6/5/2018 15:56:45	0:05	Outgoing
6/5/2018 15:58:15	0:00	Incoming
6/5/2018 15:58:24	0:31	Incoming
6/5/2018 15:58:24	0:31	Outgoing

Table 7 summarizes text message activity during the pertinent time period. Time stamps are provided in mountain standard time.

**Table 7. Text Message Activity** 

Time	Direction
6/5/2018 08:20:09	Incoming
6/5/2018 13:44:00	Incoming
6/5/2018 15:22:14	Incoming
6/5/2018 15:22:14	Incoming
6/5/2018 15:48:57	Incoming
6/5/2018 15:49:37	Incoming
6/5/2018 15:57:23	Incoming